



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

1

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/687,482

10/15/2003

Donald J. Legatt

14361/141

7964

23595 7590 06/20/2007
NIKOLAI & MERSEREAU, P.A.
900 SECOND AVENUE SOUTH
SUITE 820
MINNEAPOLIS, MN 55402

EXAMINER

SNIDER, THERESA T

ART UNIT

PAPER NUMBER

1744

MAIL DATE

DELIVERY MODE

06/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/687,482

Applicant(s)

LEGATT, DONALD J.

Examiner

/Theresa T. Snider/

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 and 21-24 is/are allowed.
- 6) ☒ Claim(s) 10 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/20/2004, 2/28/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 10 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson(4,655,078).

Johnson discloses a similar control valve however fails to disclose specific passage orientations.

Johnson discloses a body and a rotatable ball contained within the body (fig. 1, #12,30, col. 3, line 31).

Johnson discloses an upstream duct and a downstream duct in the interior of the body with the ball intermediate the ducts (fig. 1, #14,16,30).

Johnson discloses the ball having a first passage having an entrance and exit (figs. 1 and 2, #38).

Art Unit: 1744

Johnson discloses the ball having a second passage with an entrance and exit and a smaller cross sectional area than the first passage (figs. 1-2, #36).

Johnson discloses the ball pivotally adjustable to a plurality of positions intermediate the two passages (fig. 1).

Johnson discloses the entrance of the second passage being distinct from the entrance of the first passage (fig. 1, #36,38).

Johnson discloses the first passage being oriented at an angle in the range of 65 to 75° to the second passage (figs. 1-2).

Johnson discloses the entrance of the first passage being at a distance from the entrance to the second passage (figs. 1-3). It would have been obvious to one of ordinary skill in the art to determine the most appropriate distance in Johnson to allow for the most effective and desired fluid flow.

Johnson discloses the ball pivotable to an intermediate position that impedes flow (fig. 1).

With respect to claim 16, Johnson discloses the cross sectional areas of the passages being generally circular (fig. 4, unnumbered channel by #60).

With respect to claim 17, Johnson discloses the exit of the second passage being distinct from the entrance of the first passage (fig. 1, #36,38).

With respect to claim 18, Johnson discloses an actuator to rotate the ball between the two passages (fig. 4, #64,78).

With respect to claim 19, Johnson discloses the actuator being an elongated lever having a first end connected to the axis of the ball and a second end pivotable about the first end (fig. 4, #78,64, col. 4, lines 23-26 and 33-35).

Art Unit: 1744

With respect to claim 20, Johnson discloses the upstream and downstream ducts being adapted to connect to tubing (fig. 1, #26, fig. 7, #10, 108 and unnumbered tube to the left of #10).

4. Claims 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al.(3,134,405).

White et al. discloses a similar control valve however fails to disclose specific passage orientations.

White et al. discloses a body and a rotatable ball contained within the body (fig. 1, #20,37).

White et al. discloses an upstream duct and a downstream duct in the interior of the body with the ball intermediate the ducts (fig. 1, #21,26,37).

White et al. discloses the ball having a first passage having an entrance and exit (fig. 7, #38).

White et al. discloses the ball having a second passage with an entrance and exit and a smaller cross sectional area than the first passage (fig. 7, #44,46).

White et al. discloses the ball pivotally adjustable to a plurality of positions intermediate the two passages (fig. 7).

White et al. discloses the entrance of the second passage being distinct from the entrance of the first passage (fig. 7, #43,38).

White et al. discloses the first passage being oriented at an angle in the range of 65 to 75° to the second passage (figs. 7-8).

White et al. discloses the entrance of the first passage being at a distance from the entrance to the second passage (figs. 7-8). It would have been obvious to one of ordinary skill in the art to determine the most appropriate distance in White et al. to allow for the most effective and desired fluid flow.

White et al. discloses the ball pivotable to an intermediate position that impedes flow (fig. 7).

With respect to claim 15, White et al. discloses the passages being linear and diametric to the ball and being in communication at an intersection (fig. 8, #43,38,44, col. 4, lines 5-7).

With respect to claim 16, White et al. discloses the cross sectional areas of the passages being generally circular (fig. 2, #38,43).

With respect to claim 17, White et al. discloses the exit of the second passage being distinct from the entrance of the first passage (fig. 7, #38,44).

With respect to claim 18, White et al. discloses an actuator to rotate the ball between the two passages (fig. 1, #51,47).

With respect to claim 19, White et al. discloses the actuator being an elongated lever having a first end connected to the axis of the ball and a second end pivotable about the first end (fig. 1, #51, col. 3, lines 4-15).

With respect to claim 20, White et al. discloses the upstream and downstream ducts being adapted to connect to tubing (fig. 1, #22,24).

Art Unit: 1744

Allowable Subject Matter

5. Claims 1-9 and 21-24 are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses floor cleaning machines having a chassis, an agitating mechanism, a reservoir carried by the chassis, a fluid delivery system with a flow control valve having a flow control member contained with a body HOWEVER fails to disclose or fairly suggest the flow control member having a structure as set forth in claim 1.

Conclusion

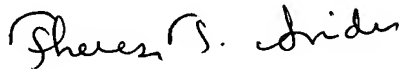
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Coates et al. discloses a floor-cleaning machine with a valve having several passages.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Theresa T. Snider/ whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Friday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



/Theresa T. Snider/
Primary Examiner
Art Unit 1744

6/14/07